SERVED: June 8, 2006

NTSB Order No. EA-5232

## UNITED STATES OF AMERICA NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD at its office in Washington, D.C. on the  $7^{\rm th}$  day of June, 2006

MAD TON G. DI ANDY

MARION C. BLAKEY, Administrator, Federal Aviation Administration,

Complainant,

v.

ROBERT LEE BARBER,

Respondent.

Docket SE-17286

## OPINION AND ORDER

Respondent appeals the oral initial decision of

Administrative Law Judge Patrick G. Geraghty, issued on June 15,

2005. By that decision, the law judge upheld the

Administrator's allegation that respondent violated sections

43.13(a), 43.13(b), and 43.9(a) of the Federal Aviation

<sup>&</sup>lt;sup>1</sup> The excerpt of the hearing transcript containing the law judge's decision is attached.

Regulations (FARs), <sup>2</sup> and reduced the 330-day suspension of

- (a) Maintenance record entries. Except as provided in paragraphs (b) and (c) of this section, each person who maintains, performs preventive maintenance, rebuilds, or alters an aircraft, airframe, aircraft engine, propeller, appliance, or component part shall make an entry in the maintenance record of that equipment containing the following information:
  - (1) A description (or reference to data acceptable to the Administrator) of work performed.
  - (2) The date of completion of the work performed.
  - (3) The name of the person performing the work if other than the person specified in paragraph (a)(4) of this section.
  - (4) If the work performed on the aircraft, airframe, aircraft engine, propeller, appliance, or component part has been performed satisfactorily, the signature, certificate number, and kind of certificate held by the person approving the work. The signature constitutes the approval for return to service only for the work performed.

\* \* \* \* \*

## Sec. 43.13 Performance rules (general).

(a) Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in Sec. 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in

 $<sup>^{2}</sup>$  FAR sections 43.9 and 43.13, 14 C.F.R. Part 43, state, in relevant part:

Sec. 43.9 Content, form, and disposition of maintenance, preventive maintenance, rebuilding, and alteration records (except inspections performed in accordance with part 91, part 125, Sec. 135.411(a)(1), and Sec. 135.419 of this chapter).

respondent's airman mechanic certificate sought by the Administrator to a 250-day suspension. We deny respondent's appeal.

The Administrator's complaint alleged that on April 13, 2004, respondent performed maintenance on a Piper Turbo Arrow, N2920C. According to undisputed evidence presented at the hearing, the aircraft, N2920C, which was based at Kempton Air Service in Grand Junction, Colorado, had landed the previous day in Concord, California, because the renter-pilot discerned problems with the engine. Kempton Air Service decided to dispatch respondent from Grand Junction to Concord to evaluate and attempt to repair the aircraft. Respondent arrived at Concord on April 13, examined the aircraft, and determined that the number 2 cylinder was damaged. Respondent testified that he determined that portions of an exhaust valve had disintegrated and had most likely been ingested into the aircraft's turbo

<sup>(...</sup>continued)

accordance with accepted industry practices. If special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator.

<sup>(</sup>b) Each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner and use materials of such a quality, that the condition of the aircraft, airframe, aircraft engine, propeller, or appliance worked on will be at least equal to its original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness).

<sup>&</sup>lt;sup>3</sup> The Administrator does not appeal the reduction in sanction, or any other aspect of the law judge's ruling.

charger, and, therefore, that the turbo charger, and perhaps other portions of the engine assembly, were damaged or likely damaged. Respondent could not repair the turbo charger in Concord. Respondent testified that he installed another "core" (or, as he explained, serviceable) cylinder assembly that he brought with him from Grand Junction.

Soon after respondent completed his work, the aircraft departed Concord for Grand Junction. Almost immediately after takeoff, the aircraft suffered a loss of engine power and the renter-pilot performed a forced landing on a nearby highway.

FAA personnel discovered in the course of the accident investigation that: (1) the cylinder respondent replaced was not the correct type of cylinder as specified by the engine manufacturer, in that the turbo-charged engine specifications called for a low compression cylinder and respondent installed a high-compression cylinder; and (2) respondent did not torquetighten the bolts as specified by the manufacturer in the engine overhaul manual.

Respondent testified at the hearing that it was not his intent, after initially assessing the aircraft engine, to perform maintenance on the engine or to endorse it as airworthy. Rather, respondent claimed he was simply readying the aircraft for a major overhaul, and explained his installation of a replacement cylinder as complying with company policy to reattach all items to prevent loss or other problems.

Respondent claimed he explained to the pilot, after putting the

aircraft engine back together, that the turbo charger was damaged and the engine would likely not develop full manifold pressure. Respondent did not make any logbook entries or otherwise document the work he did or the discrepancies with the aircraft. The record is clear that the pilot of the accident aircraft observed the damaged cylinder assembly. Respondent further testified that the pilot "showed up after I ... was just finishing up putting on the cowling," and:

was loading stuff in the aircraft and I took him aside and I said I wanted to show him something. And I picked up the cylinder and I told him that the biggest portion of the valve was missing and I knew that part of it went through the turbocharger and damaged that, and that I didn't know where the rest of it went; and that if he took it, he would have low manifold pressure and he could possibly lose power.

Hearing Transcript (Tr.) at 155-156. Respondent also testified that the pilot thereafter "turned and he went around to the other side of the aircraft where his son was loading the baggage compartment and finished loading his stuff," and that he (respondent) then left to try to call Larry Kempton because he (respondent) "thought he [Kempton] could intervene." Tr. at 156. When asked why he didn't give the pilot a written discrepancy list, respondent testified: "I guess I could have thrown it at him. He was walking away from me." Tr. at 163. A flight instructor who accompanied Mr. Barber to Concord and waited for him at Concord during his maintenance efforts

testified that he never heard respondent tell anyone, including the accident pilot, that the accident aircraft was not airworthy or not safe for flight. Tr. at 53.

The law judge found that respondent had clearly performed maintenance and affirmed the regulatory violations.

Specifically, the law judge found that respondent violated FAR section 43.13(a) because the evidence indicated that respondent used incorrect torque values when he installed the cylinder assembly, and FAR section 43.13(b) because the aircraft was clearly not in an acceptable condition after respondent installed a high compression cylinder assembly on the aircraft's low compression engine. Finally, the law judge affirmed the violation of FAR section 43.9(a) because respondent conceded he made no log entries regarding the maintenance.

Respondent's appeal rests, essentially, on a reiteration of his hearing testimony that he "did not perform maintenance that would have required compliance" with FAR sections 43.9 or 43.9, because, he argues, all he did on April 13 was "open up the cylinder, realize the engine was beyond his ability to repair, and put the parts back together awaiting a decision from the owner on what to do next." Resp. Brief at 4. In support of this contention, respondent claims that the work he performed did not fit within the definition of maintenance set forth in 14 C.F.R. Part 1, which defines maintenance as "inspection, overhaul, repair, preservation, and the replacement of

parts[.]"<sup>4</sup> The law judge's decision clearly rejects respondent's exculpatory claim that he had no intention to perform a repair or any other type of maintenance on April 13, 2004. See Tr. at 201 ("So however I look at this, there was an inspection, there was an attempt to repair, at least. There was ... possibly also an intent to preserve things, and there was certainly replacement of parts."). We defer to the credibility assessments of law judges, absent a demonstration of clear error. Administrator v. Smith, 5 NTSB 1560, 1563 (1986).

Respondent argues that the law judge "implicitly held, without any authority, that 'buttoning up' a clearly unairworthy aircraft without attempting any repairs is equivalent to inspection and repair intending to return the aircraft to service." Making reference to the "absolutely uncontroverted testimony of [respondent]" that he "knew there was no way he could have repaired the aircraft and returned it to service, [and] all he could do was put the pieces back together to await what would, undoubtedly, be a complete overhaul," respondent claims the law judge's decision is untenable because all manner of hypothetical maintenance work could, while in progress, be deemed by the Administrator to be not in accordance with FAR

<sup>&</sup>lt;sup>4</sup> The definition of maintenance in 14 C.F.R. Part 1 expressly excludes "preventive maintenance," which is defined as "simple or minor preservation operations and the replacement of small standard parts not involving complex assembly operations." Respondent attempts to argue that his actions on April 13, 2004, were nothing more than preventative maintenance. However, preventive maintenance also falls within the ambit of the requirements of FAR sections 43.9 and 43.13, so this distinction is not helpful to respondent's case.

requirements.

We find this argument to be without merit, for the facts on this record support the law judge's credibility determination that respondent did, in fact, intend to perform maintenance. For example, the FAA inspector who testified about the crash investigation noted that not only was an inappropriate cylinder assembly installed on the engine, but that respondent had completely reassembled the engine, including connecting the ignition system, connecting the induction and exhaust systems, and connecting the fuel injection system. Moreover, the FAA inspector's post-accident interviews of respondent revealed that he used specific, albeit incorrect, torque values and tightened the bolts in a specific sequence in reattaching the replaced cylinder assembly; these actions are inconsistent with an intention to simply "button up" the aircraft for preservation or storage pending arrangements for a complete engine overhaul. 6

Regardless of the credibility issues, or whether respondent's intention was not to return the aircraft to service

<sup>&</sup>lt;sup>5</sup> We note also that respondent admitted paragraph 11 of the Administrator's complaint which stated, "[s]ubsequent to the above-described *maintenance* [i.e., removal and replacement of the number 2 cylinder assembly] you failed to perform a test run or a test flight." (emphasis added).

<sup>&</sup>lt;sup>6</sup> We also note that the pilots of both aircraft -- the accident aircraft that respondent performed maintenance upon, and the aircraft that respondent rode in as a passenger to Concord -- arranged to fly together back to Grand Junction; several witnesses testified that even though respondent rode in the aircraft taxiing out to the runway just behind the accident aircraft, he never uttered to anyone around him any concern about the accident aircraft taking off.

because he intended to later perform, or have performed, a complete engine overhaul, we adopt, on the facts of this case, the law judge's finding that respondent's efforts constituted maintenance as that term is defined by the Administrator.

Respondent, by his own testimony, inspected and replaced parts of the engine; we also think it clear on this record that he engaged in efforts to repair the engine. These activities are clearly defined by the Administrator to constitute maintenance for purposes of the regulatory requirements of Part 43.7 Simply put, nothing in respondent's appeal brief demonstrates, on the basis of record evidence, any reversible error in the law judge's decision.

## ACCORDINGLY, IT IS ORDERED THAT:

 $<sup>^{\</sup>rm 7}$  Respondent also takes specific exception to the law judge's finding of a violation of FAR section 43.9(a) because respondent had not endeavored to return the aircraft to service; respondent elaborates further: "there is no basis in [FAR section 43.9(a)] for requiring a contemporaneous record to be made during [an interim] phase of the repair, nor anything in the regulations that place a time limit on when the entry should be made." Resp. Brief at 7. Respondent's argument appears to be based on the fact that the law judge noted that respondent testified he didn't have time to make any maintenance entries prior to the accident aircraft's departure, and reasoned that, even if the log books were not present with the aircraft, "some type of entry should have been made on some type of document ... listing the discrepancies and the detail as to the work that was done and an entry indicating that the aircraft was unairworthy." Tr. at 204. Again, respondent's argument assumes, incorrectly, that respondent's claim that he was not intending to repair the accident aircraft was credited by the law judge. While it is true that FAR section 43.9(a) only requires work to be signed off at the time an aircraft is returned to service, the law judge's decision is based on the premise, supported by the evidence, that respondent did, in fact, intend to repair the aircraft so that it could be flown back to Grand Junction.

- 1. Respondent's appeal is denied; and
- 2. The 250-day suspension of respondent's mechanic certificate shall begin 30 days after the service date indicated on this opinion and order.<sup>8</sup>

ROSENKER, Acting Chairman, and ENGLEMAN CONNERS, HERSMAN, and HIGGINS, Members of the Board, concurred in the above opinion and order.

 $<sup>^{8}</sup>$  For the purpose of this order, respondent must physically surrender his certificate to a representative of the Federal Aviation Administration pursuant to 14 C.F.R. 61.19(g).